# YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT 1947 Galileo Court, Suite 103, Davis, CA 95618 (530) 757-3650

# TITLE V OPERATING PERMIT Permit Number: F-01059-9

**ISSUED TO:** 

Recology Hay Road 6426 Hay Road Vacaville, CA 95687 **PLANT SITE LOCATION:** 

6426 Hay Road Vacaville, CA 95687

**ISSUED BY:** 

Mat Ehrhardt, P.E., Air Pollution Control Officer

Date

8/24/2011

**PROPOSED** 

June 10, 2011

**EFFECTIVE** 

August 24, 2011

**EXPIRATION** 

December 2, 2013

Nature of Business:

Municipal Solid Waste Landfill

SIC Code:

4953

Responsible Official:

Site Contact Person:

Name:

**Greg Pryor** 

Name:

Chris Taylor

Title:

General Manager

Title:

Site Manager

Phone:

707-678-3257

Phone:

707-678-4718

# **TABLE OF CONTENTS**

1.	FACILITY EMISSION UNITS AND EQUIPMENT LISTS:			
	Α.	Insignificant Emissions Units	1	
	B.	Significant Emissions Units	1	
11.	SPECIFIC UNIT REQUIREMENTS			
	Α.	Emission Limits	3	
	B.	Work Practice and Operational Requirements	5	
	C.	Monitoring and Testing Requirements 1	C	
	D.	Recordkeeping Requirements 1	2	
III.	FAC	ILITY WIDE REQUIREMENTS 1	4	
	Α.	Opacity 1	4	
	В.	Nuisance 1	4	
	C.	Circumvention 1	5	
	D.	General Permit Requirements 1	5	
IV.	TITL	E V GENERAL REQUIREMENTS	6	
	A.	Right of Entry 1	6	
	B.	Compliance with Permit Conditions	6	
	C.	Emergency Provisions 1		
	D.	Severability		
	E.	Compliance Certification 1		
	F.	Permit Life		
	G.	Payment of Fees 1		
	н.	Permit Revision Exemption 1		
	1.	Application Requirements1		
	J.	Permit Reopening for Cause		
	K.	Recordkeeping 1		
	L.	Reporting Requirements	9	

# I. FACILITY EMISSION UNITS AND EQUIPMENT LISTS:

# A. Insignificant Emissions Units

Insignificant emissions units or exempted equipment may be supplemented, replaced or modified with non-identical equipment without notice provided exemption status has not changed as defined in current district or federal rules. The equipment listed in Table 1 is a partial listing of equipment currently identified as exempt or insignificant and not required to obtain an operating permit pursuant to Rule 3.2 (Exemptions) of the Yolo-Solano Air Quality Management District.

Table 1: Exempted and Insignificant Emissions Units (partial listing)

Insignificant Equipment Description	Basis for Exemption
Mobile construction equipment	District Rule 3.2, Section 101.1
Passenger and refuse hauling vehicles	District Rule 3.2, Section 101.1
Diesel-fired storm water pump, <50 hp	District Rule 3.2, Section 105.1
Aboveground diesel tank	District Rule 3.2, Section 109.2
Aboveground waste oil tanks	District Rule 3.2, Section 109.2
Oil filter crusher	District Rule 3.2, Section 109.2

## B. Significant Emissions Unit Information

Each of the following emission units has been constructed pursuant to issuance of an Authority to Construct in accordance with District Rule 3.1 (General Permit Requirements) and Rule 3.4 (New Source Review).

Identification Number: P-28-98(a)

Equipment Description: One 500 gallon aboveground gasoline storage

tank, one gasoline dispenser (1 nozzle), and one

gasoline pressure/vacuum vent valve

Control Equipment: Balance vapor recovery system, Executive

Orders: Phase I - G-70-142-B, Phase II -

G-70-52-AM

Permit No. F-01059-9 Recology Hay Road

Identification Number: P-64-00

Equipment Description: Petroleum contaminated soil handling for daily or

intermediate cover material and for construction

related uses on site

Control Equipment: None

Identification Number: P-85-06(a4)

Equipment Description: MSW landfill not to exceed a total maximum

design capacity of 35.6 million cubic yards (17.0

million megagrams)

Control Equipment: Negative pressure landfill gas collection system

with up to 100 collection wells (equipped with a 1500 CFM blower at 30 HP) and routed to a 45.6 MMBtu/hr enclosed flare with a minimum combustion zone residence time of 0.6 seconds

Identification Number: P-86-06

Equipment Description: 150 BHP diesel fired Volvo IC engine, Model No.

TAD520GE, Serial No. 5310181982, Model Year

2006, EPA Certified Tier II Engine

Control Equipment: Aftercooler and Turbocharger

Identification Number: P-81-10

Equipment Description: Waste pile 9 (approximately 7 acre lined

containment pond) and various drying areas, including 2 adjacent drying areas and drying on

top of lined waste cells

Control Equipment: None

Identification Number: P-5-11

Equipment Description: 170 BHP propane fired Kem Equipment IC

engine, Model No. 8.1L, Serial No. 6284080510,

Model Year 2010

Control Equipment: Automatic air/fuel ratio controller and catalytic

converter

#### II. SPECIFIC UNIT REQUIREMENTS

## A. Emission Limits

## Gasoline Dispensing and Storage Operation (P-28-98(a))

1. The VOC emissions from the gasoline storage and dispensing operation shall not exceed 0.3 lb/day, 20 lb/1<sup>st</sup> calendar quarter, 20 lb/2<sup>nd</sup> calendar quarter, 20 lb/3<sup>rd</sup> calendar quarter, 20 lb/4<sup>th</sup> calendar quarter, and 0.04 tons/calendar year. [District Rule 3.4/C-10-117]

# Use of Designated Petroleum Contaminated Soil (P-64-00)

- 2. The VOC emissions from the use of designated petroleum contaminated soil shall not exceed 249.0 lb/day, 6,500 lb/1<sup>st</sup> calendar quarter, 6,500 lb/2<sup>nd</sup> calendar quarter, 6,500 lb/3<sup>rd</sup> calendar quarter, 6,500 lb/4<sup>th</sup> calendar quarter, and 13.00 tons/calendar year. [District Rule 3.4/C-99-134]
- 3. The PM<sub>10</sub> emissions from the use of designated petroleum contaminated soil shall not exceed 44.0 lb/day, 402 lb/1<sup>st</sup> calendar quarter, 402 lb/2<sup>nd</sup> calendar quarter, 402 lb/3<sup>rd</sup> calendar quarter, 402 lb/4<sup>th</sup> calendar quarter, and 0.82 tons/year. [District Rule 3.4/C-99-134]

## MSW Landfilling Operation (P-85-06(a4))

- 4. The VOC emissions from the MSW landfill operation and the enclosed landfill gas flare shall not exceed 194.7 lb/day, 17,520 lb/1<sup>st</sup> calendar quarter, 17,714 lb/2<sup>nd</sup> calendar quarter, 17,909 lb/3<sup>rd</sup> calendar quarter, 17,909 lb/4<sup>th</sup> calendar quarter, and 35.53 tons/calendar year. [District Rule 3.4/C-10-34]
- 5. The CO emissions from the landfill gas fired flare shall not exceed 218.9 lb/day, 19,699 lb/1<sup>st</sup> calendar quarter, 19,918 lb/2<sup>nd</sup> calendar quarter, 20,137 lb/3<sup>rd</sup> calendar quarter, 20,137 lb/4<sup>th</sup> calendar quarter, and 39.95 tons/calendar year. [District Rule 3.4/C-10-34]
- 6. The NOx emissions from the landfill gas fired flare shall not exceed 54.7 lb/day, 4,925 lb/1<sup>st</sup> calendar quarter, 4,980 lb/2<sup>nd</sup> calendar quarter, 5,034 lb/3<sup>rd</sup> calendar quarter, 5,034 lb/4<sup>th</sup> calendar quarter, and 9.99 tons/calendar year. [District Rule 3.4/C-10-34]
- The SO<sub>x</sub> emissions from the landfill gas fired flare shall not exceed 150.0 lb/day, 13,600 lb/1<sup>st</sup> calendar quarter, 13,600 lb/2<sup>nd</sup> calendar quarter, 13,600 lb/3<sup>rd</sup> calendar quarter, 13,600 lb/4<sup>th</sup> calendar quarter, and 27.20 tons/calendar year. [District Rule 3.4/C-10-34]
- 8. The PM $_{10}$  emissions from the landfill gas fired flare shall not exceed 18.4 lb/day, 1,655 lb/1 $^{\rm st}$  calendar quarter, 1,673 lb/2 $^{\rm nd}$  calendar quarter, 1,692 lb/3 $^{\rm rd}$  calendar

quarter, 1,692 lb/ $4^{th}$  calendar quarter, and 3.36 tons/calendar year. [District Rule 3.4/C-10-34]

- 9. The emission concentrations for the flare shall not exceed the following:
  - a. VOC (measured as hexane): 31.4 ppmv @ 3% oxygen;
  - b. CO: 0.200 lb/MMBtu; and
  - c. NOx (as NO<sub>2</sub>): 0.050 lb/MMBtu. [District Rule 3.4/C-10-34]

# Internal Combustion Engine Powering an Emergency Generator (P-86-06)

- 10. The VOC emissions shall not exceed 2.4 lb/day, 20 lb/1<sup>st</sup> calendar quarter, 20 lb/2<sup>nd</sup> calendar quarter, 20 lb/3<sup>rd</sup> calendar quarter, 20 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/C-06-119]
- 11. The CO emissions shall not exceed 6.5 lb/day, 54 lb/1<sup>st</sup> calendar quarter, 54 lb/2<sup>nd</sup> calendar quarter, 54 lb/3<sup>rd</sup> calendar quarter, 54 lb/4<sup>th</sup> calendar quarter, and 0.03 tons/year. [District Rule 3.4/C-06-119]
- 12. The NO<sub>x</sub> emissions shall not exceed 32.5 lb/day, 271 lb/1<sup>st</sup> calendar quarter, 271 lb/2<sup>nd</sup> calendar quarter, 271 lb/3<sup>rd</sup> calendar quarter, 271 lb/4<sup>th</sup> calendar quarter, and 0.14 tons/year. [District Rule 3.4/C-06-119]
- 13. The SO<sub>x</sub> emissions shall not exceed 1.5 lb/day, 12 lb/1<sup>st</sup> calendar quarter, 12 lb/2<sup>nd</sup> calendar quarter, 12 lb/3<sup>rd</sup> calendar quarter, 12 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/C-06-119]
- 14. The PM<sub>10</sub> emissions shall not exceed 0.7 lb/day, 6 lb/1<sup>st</sup> calendar quarter, 6 lb/2<sup>nd</sup> calendar quarter, 6 lb/3<sup>rd</sup> calendar quarter, 6 lb/4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-06-119]

# Receiving, Storage, and Drying of Non-hazardous Sludge with Odor Potential (P-81-10)

15. The VOC emissions from the non-hazardous sludge operation shall not exceed 0.1 lb/day, 1 lb/1<sup>st</sup> calendar quarter, 1 lb/2<sup>nd</sup> calendar quarter, 1 lb/3<sup>rd</sup> calendar quarter, 1 lb/4<sup>th</sup> calendar quarter, and negligible tons/calendar year. [District Rule 3.4/C-10-42]

# **Internal Combustion Engine Powering a Tipper (P-5-11)**

- 16. The VOC emissions from the tipper engine shall not exceed 1.0 lb/day, 49 lb/1<sup>st</sup> calendar quarter, 49 lb/2<sup>nd</sup> calendar quarter, 49 lb/3<sup>rd</sup> calendar quarter, 49 lb/4<sup>th</sup> calendar quarter, and 0.10 tons/calendar year. [District Rule 3.4/C-10-58 and 40 CFR Part 60.4234]
- 17. The CO emissions from the tipper engine shall not exceed 25.5 lb/day, 1,305 lb/1st calendar quarter, 1,305 lb/2nd calendar quarter, 1,305 lb/3rd calendar quarter, 1,305 lb/4th calendar quarter, and 2.61 tons/calendar year. [District Rule 3.4/C-10-58 and 40 CFR Part 60.4234]

- 18. The NOx emissions from the tipper engine shall not exceed 3.5 lb/day, 179 lb/1<sup>st</sup> calendar quarter, 179 lb/2<sup>nd</sup> calendar quarter, 179 lb/3<sup>rd</sup> calendar quarter, 179 lb/4<sup>th</sup> calendar quarter, and 0.36 tons/calendar year. [District Rule 3.4/C-10-58 and 40 CFR Part 60.4234]
- 19. The SO<sub>x</sub> emissions from the tipper engine shall not exceed 0.5 lb/day, 47 lb/1<sup>st</sup> calendar quarter, 47 lb/2<sup>nd</sup> calendar quarter, 48 lb/3<sup>rd</sup> calendar quarter, 48 lb/4<sup>th</sup> calendar quarter, and 0.10 tons/calendar year. [District Rules 2.11 and 3.4/C-10-58]
- 20. The PM<sub>10</sub> emissions from the tipper engine shall not exceed 0.4 lb/day, 35 lb/1<sup>st</sup> calendar quarter, 35 lb/2<sup>nd</sup> calendar quarter, 36 lb/3<sup>rd</sup> calendar quarter, 36 lb/4<sup>th</sup> calendar quarter, and 0.07 tons/calendar year. [District Rules 2.11 and 3.4/C-10-58]
- 21. Emission rates for the tipper engine shall not exceed the following:
  - a. VOC (measured as methane) 72 ppmv @ 15% O<sub>2</sub>;
  - b. CO 1,083 ppmv @ 15% O<sub>2</sub>; and
  - c. NOx (as NO<sub>2</sub>) 90 ppmv @ 15% O<sub>2</sub>. [District Rule 2.32 and District Rule 3.4/C-10-58]
- 22. For all operations, except the IC engine under P-86-06, landfill operation under P-85-06(a4), the IC engine operating under P-5-11, and the sludge acceptance operation under P-81-10, the Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
  - a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines; or
  - b. Greater than 40% opacity. [District Rule 2.3]
- 23. For the general operations at the MSW landfill operation under P-85-06(a4), the IC engine under P-86-06, the IC engine operating under P-5-11, and the sludge acceptance operation under P-81-10, the Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
  - As dark or darker in shade than No. 1 on the Ringelmann Chart; or
  - b. Greater than 20% opacity. [District Rule 3.1/C-06-119, C-10-34, C-10-42, and C-10-58]
- B. Work Practice and Operational Requirements

#### Gasoline Dispensing and Storage Operation (P-28-98(a))

The gasoline throughput for the gasoline storage and dispensing operation shall not exceed 120 gallons/day, 7,500 gallons/1<sup>st</sup> calendar quarter, 7,500 gallons/2<sup>nd</sup> calendar quarter, 7,500 gallons/3<sup>rd</sup> calendar quarter, 7,500 gallons/4<sup>th</sup> calendar quarter, and 30,000 gallons/calendar year. [District Rule 3.4/C-10-117]

- 25. Gasoline shall not be stored in open containers of any size and gasoline shall not be handled in any manner that allows gasoline liquid or vapors to enter the atmosphere, contaminate the ground, or the public sewer system. [District Rule 2.22, §301]
- 26. A person shall not top off motor vehicle fuel tanks. [District Rule 2.22, §303]
- 27. Transfer of gasoline into any storage tank and/or into any motor vehicle fuel tank shall be made using a California Air Resources Board (CARB) certified vapor recovery system that recovers or processes displaced gasoline vapors by at least 95% by weight. [District Rule 2.22, §304.1 and §305.1]
- 28. The vapor recovery system shall be maintained and operated according to the manufacturer's specifications and as per the most recent applicable CARB executive orders. [District Rule 2.22, §304.2 and §305.2/C-10-117]
- 29. All vapor return lines shall be connected between the transport vessel and the storage tank while gasoline is transferred. [District Rule 2.22, §304.3/C-10-117]
- 30. The gasoline storage tank shall be equipped with a CARB certified submerged fill tube. The fill tube shall be maintained liquid tight, vapor tight, and free of air ingestion. [District Rule 2.22, §304.4 and §304.5]
- 31. The following equipment shall be installed, operated, and maintained as specified below:
  - a. All fill tubes are equipped with vapor tight caps;
  - b. All dry breaks are equipped with vapor tight seals and vapor tight caps;
  - c. All CARB certified coaxial fill tubes are spring-loaded and operated so that the vapor passage from the storage tank back to the transport vessel is not obstructed;
  - d. The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system;
  - e. All storage tank vapor return lines without dry breaks are equipped with vapor tight caps;
  - f. Each vapor tight cap is in a closed position except when the fill tube or dry break it serves is actively in use; and
  - g. Each gasoline delivery elbow is equipped with a sight window. [District Rule 2.22, §304.6]
- 32. The storage tank shall be equipped with a pressure-vacuum relief value in accordance with the most recent CARB executive orders. [District Rule 2.22, §304.11]
- 33. The vapor recovery system and associated components shall be operated and maintained free of major defects and in a vapor and liquid tight condition at all times. [District Rule 2.22, §305.3/C-10-117]
- 34. All balance-system nozzle boots shall be replaced at least once per year with a record made in the maintenance log. [District Rule 2.22, §305.6/C-10-117]

- 35. In the event of a driveoff, the owner/operator shall either perform qualified repairs and conduct and pass appropriate reverification tests or replace affected equipment. The District shall be notified within 24 hours of completion of these requirements. [District Rule 2.22, §305.10/C-10-117]
- 36. The Permit Holder shall implement a self-compliance program that includes:
  - a. Quarterly self-inspection and maintenance procedures to be completed at least once every three (3) months using a District approved quarterly inspection form; and
  - Annual self-inspection procedures to be completed at least once every twelve
     (12) months using a District approved annual inspection form. [District Rule
     2.22, §306.2/C-10-117]

# Petroleum Contaminated Soil Handling Operation (P-64-00)

- 37. This permit allows the Permit Holder to accept contaminated soil only for use as daily or intermediate cover material and for construction related uses. This permit does not allow the Permit Holder to treat or aerate contaminated soil to cause the evaporation of uncontrolled VOCs to the atmosphere. [District Rule 3.4/C-99-134]
- 38. The Permit Holder shall cover stored petroleum contaminated soil with six (6) inches of clean soil. As expeditiously as possible, the Permit Holder shall cover petroleum contaminated soil used as construction material with twelve (12) inches of clean soil. [District Rule 3.4/C-99-134]
- 39. The Permit Holder shall not store petroleum contaminated soil together with biosolid sludge. [District Rule 3.4/C-99-134]

# MSW Landfilling Operation (P-85-06(a4))

- 40. The amount of municipal waste received by the landfill operation shall not exceed 2,400 tons/day, 108,000 tons/1<sup>st</sup> calendar quarter, 109,200 tons/2<sup>nd</sup> calendar quarter, 110,400 tons/3<sup>rd</sup> calendar quarter, 110,400 tons/4<sup>th</sup> calendar quarter, and 438,000 tons/year. [District Rule 3.4/C-10-34]
- 41. Solid waste throughput shall not exceed 1,200 tons per day, as averaged on a calendar week basis. [District Rule 3.4/C-10-34]
- 42. The amount of landfill gas combusted in the flare shall not exceed 2.432 million cubic feet/day, 218.9 million cubic feet/1<sup>st</sup> calendar quarter, 221.3 million cubic feet/2<sup>nd</sup> calendar quarter, 223.7 million cubic feet/3<sup>rd</sup> calendar quarter, 223.7 million cubic feet/year. [District Rule 3.4/C-10-34]
- 43. The SO<sub>x</sub> emissions from the landfill gas fired flare shall not exceed 150.0 lb/day, 13,600 lb/1<sup>st</sup> calendar quarter, 13,600 lb/2<sup>nd</sup> calendar quarter, 13,600 lb/3<sup>rd</sup>

- calendar quarter, 13,600 lb/ $4^{th}$  calendar quarter, and 54,400 pounds/calendar year. [District Rule 3.4/C-10-34]
- 44. The minimum flare operating temperature required to achieve compliance with the VOC emission concentration limit shall be 1380 degrees Fahrenheit (° F). The flare combustion flame temperature shall be measured in units of degrees F and shall be monitored at the thermal couple in the exhaust stack. Flame temperature shall be monitored with a continuous reading temperature sensor. [District Rule 3.4/C-10-34]
- 45. Only landfill gas shall be burned in the flare. No supplemental fuel may be burned in the flare, excluding pilot gas. [District Rule 3.4/C-10-34]
- 46. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in cubic feet) of landfill gas combusted in the flare. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4/C-10-34]
- 47. The Permit Holder shall install and maintain such facilities on the flare stack as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with Air Resources Board Test Method 1. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4/C-10-34]
- 48. The Permit Holder is prohibited from adding any liquid (other than leachate and landfill gas condensate) in a controlled fashion to any waste mass in order to accelerate or enhance the anaerobic biodegradation of the waste. [District Rule 3.4/C-10-34]
- 49. Upon achieving a calculated NMOC emission rate of 50 megagrams or greater per year, the Permit Holder shall comply with the requirements of 40 CFR Part 60.752(b)(2). The landfill's NMOC emission rate shall be calculated in accordance with the requirements of 40 CFR Part 60.754. [District Rule 3.4/C-10-34]
- 50. The Permit Holder shall comply with the applicable requirements for active disposal sites for asbestos-containing materials as set forth in 40 CFR Part 61, Subpart M National Emission Standard for Asbestos. [40 CFR Part 61.140/C-10-34]
- 51. The Permit Holder shall comply with the applicable requirements for the handling and the disposal of the affected appliances and equipment containing ozone depleting substances, as set forth in 40 CFR Part 82, Subpart F Recycling and Emission Reduction. [40 CFR Part 82.150/C-10-34]

# Internal Combustion Engine Powering an Emergency Generator (P-86-06)

52. The diesel usage for the IC engine shall not exceed 168 gallons/day, 1,400 gallons/1<sup>st</sup> calendar quarter, 1,400 gallons/2<sup>nd</sup> calendar quarter, 1,400 gallons/4<sup>th</sup> calendar quarter, and 1,400 gallons/calendar year. [District Rule 3.4/C-06-119]

- 53. The Permit Holder shall not operate the IC engine more than 50 hours per calendar year for maintenance and testing purposes, and such operation shall be scheduled in cooperation with the District so as to limit air quality impact. [District Rule 3.4, §110.1/C-06-119]
- 54. The Permit Holder shall not operate the IC engine more than 200 hours per calendar year. [District Rule 3.4, §110.2/C-06-119]
- 55. The Permit Holder shall not operate the IC engine for the supplying of power to a serving utility for distribution on the grid. [District Rule 3.4, §110.3/C-06-119]
- 56. The Permit Holder's operation of the IC engine for reasons other than maintenance purposes shall be limited to actual interruptions of electrical power by the serving utility. [District Rule 3.4, §110.4/C-06-119]

Receiving, Storage, and Drying of Non-hazardous Sludge with Odor Potential (P-81-10)

- 57. The amount of non-hazardous sludge waste received, stored, and dried shall not exceed 1,000 tons/day, 27,000 tons/1<sup>st</sup> calendar quarter, 18,000 tons/2<sup>nd</sup> calendar quarter, 10,000 tons/3<sup>rd</sup> calendar quarter, 26,000 tons/4<sup>th</sup> calendar quarter, and 81,000 tons/year. [District Rule 3.4/C-10-42]
- 58. The facility shall implement and maintain an odor control plan for prevention of nuisance odors. The plan shall be updated as necessary, or as required by the District, and any changes to the plan shall be approved by the District prior to implementation. [District Rule 3.4/C-10-42]

## Internal Combustion Engine Powering a Tipper (P-5-11)

- 59. The amount of propane combusted in the engine shall not exceed 394 gallons/day, 20,172 gallons/1<sup>st</sup> calendar quarter, 20,172 gallons/2<sup>nd</sup> calendar quarter, 20,172 gallons/3<sup>rd</sup> calendar quarter, 20,172 gallons/4<sup>th</sup> calendar quarter, and 80,688 gallons/year. [District Rule 3.4/C-10-58]
- 60. A non-resettable, totalizing fuel flow meter shall be installed and utilized to measure the quantity of propane combusted in the engine. [District Rule 2.32, §304.1/C-10-58]
- 61. The air to fuel ratio controller must be maintained and operated appropriately to ensure proper operation of the engine and control device. [40 CFR Part 60.4243(g)/C-10-58]

## C. Monitoring and Testing Requirements

## Gasoline Dispensing and Storage Operation (P-28-98(a))

- 62. A source test shall be conducted and passed every twelve (12) calendar months. [District Rule 2.22, §309.3/C-10-117]
- 63. No adjustments shall be made to the facility the day of the source test. The test shall be conducted in an "as-is" condition. [District Rule 2.22, §309.3/C-10-117]
- 64. Source test methods performed shall include: Static Pressure Decay TP-201.3B. [District Rule 2.22, §309.1/C-10-117]
- 65. The District shall be notified of the date and time of all source testing at least three (3) days in advance of the testing. [District Rule 2.22, §309.4(b)/C-10-117]
- 66. The Permit Holder shall submit all test results within two (2) days of conducting the test. [District Rule 2.22, §309.4(d)/C-10-117]
- 67. If an initial or reverification test is failed, the facility must successfully pass a retest prior to resuming operation. If a dispenser has failed testing and the failure does not affect the proper operation of the rest of the facility, the facility may resume operation with the affected dispenser isolated and shut down. [District Rule 2.22, §309.5/C-10-117]

# Petroleum Contaminated Soil Handling Operation (P-64-00)

68. The Permit Holder may measure total VOC concentration of the petroleum contaminated soil for purposes of calculating VOC emissions if the District approves in writing the sampling and test measurement protocol before the total VOC concentration is measured. [District Rule 3.4/C-99-134]

## MSW Landfilling Operation (P-85-06(a4))

- 69. The Permit Holder shall operate the enclosed flare with a minimum combustion zone residence time of 0.6 seconds, and shall equip the flare with automatic temperature controls designed to control the average minimum temperature, on a rolling 3-hour average basis, at or above 1,380 degrees Fahrenheit (° F). The enclosed flare shall also be equipped with an automatic shutoff gas valve and an automatic re-start system. [District Rule 3.4/C-10-34]
- 70. The minimum flare operating temperature required to achieve compliance with the VOC emission concentration limit shall be 1,380° F. The flare combustion flame temperature shall be measured in units of "° F" and shall be monitored at thermal couple in the exhaust stack. Flame temperature shall be monitored with a continuous reading temperature sensor. [District Rule 3.4/C-10-34]

- 71. The Permit Holder shall analyze the fuel's higher heating value (wet basis) at least once every twelve (12) consecutive month period. [District Rule 3.4/C-10-34]
- 72. The Permit Holder shall analyze the fuel's hydrogen sulfide (H<sub>2</sub>S) content at least once every 30 consecutive calendar days and shall use the results of the analysis to calculate and record the SO<sub>x</sub> emissions for the corresponding time period. The calculation methodology shall be approved by the District and shall assume that 100% of the sulfur from H<sub>2</sub>S is converted and emitted as SO<sub>x</sub>. [District Rule 3.4/C-10-34]
- 73. The Permit Holder shall perform a source test on the flare at least once every twelve (12) months in order to demonstrate compliance with the VOC, CO, and NO<sub>x</sub> emission limits. [District Rule 3.4/C-10-34]
- 74. Source testing shall be conducted using the following test methods:
  - a. VOC EPA Method 18;
  - b. CO EPA Method 10 or CARB Method 100;
  - c. NOx (as NO<sub>2</sub>) EPA Method 7E or CARB Method 100; and
  - d. Stack gas oxygen EPA Method 3A or CARB Method 100. [District Rule 3.4/C-10-34]
- 75. The Permit Holder shall submit a NMOC report to the District using the procedures specified in 40 CFR Part 60.754(a) at least once every twelve (12) months, except as provided in 40 CFR Part 60.757(b)(1)(ii) or 40 CFR Part 60.757(b)(3). [District Rule 3.4/C-10-34]
- 76. The District must be notified prior to any emissions testing event (including NMOC related sampling or flare source testing) and a protocol must be submitted for approval 30 days prior to testing. The results of an emissions testing event shall be submitted to the District within 60 days of the test date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4/C-10-34]
- 77. If the estimated NMOC emission rate as reported in the annual report to the Air Pollution Control Officer (APCO) is less than 50 megagrams per year in each of the next five (5) consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report.
  - a. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated.
  - b. All data and calculations upon which this estimate is based shall be provided to the APCO.
  - c. This estimate shall be revised at least once every five (5) years.
    - i. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the APCO.

- ii. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. [40 CFR Part 60.757(b)(1)(ii)]
- 78. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [40 CFR Part 60.757(b)(2)]

## Internal Combustion Engine Powering a Tipper (P-5-11)

- 79. The Permit Holder shall perform a source test at least once every 12 months to demonstrate compliance with VOC, CO and NO<sub>x</sub> emission limits. [District Rules 2.32, §303.2 and 3.4/C-10-58]
- 80. The Permit Holder shall install and maintain such facilities as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with Air Resources Board Test Method 1. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4/C-10-58]
- 81. Source testing shall be conducted using the following test methods:
  - a. VOC EPA Method 18;
  - b. CO EPA Method 10, or CARB Method 100;
  - c. NO<sub>x</sub> (as NO<sub>2</sub>) EPA Method 7E, or CARB Method 100; and
  - d. Stack gas oxygen EPA Method 3A, or CARB Method 100. [District Rule 2.32, §502 and District Rule 3.4/C-10-58]
- 82. The District must be notified prior to any emissions testing event (source test or screening analysis), and a protocol must be submitted for approval 14 days prior to testing. The results of an emissions testing event shall be submitted to the District within 60 days of the test date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4/C-10-58]

## D. Recordkeeping Requirements

## Gasoline Dispensing and Storage Operation (P-28-98(a))

- 83. The owner/operator shall implement a preventative maintenance program with a manual that documents inspections, maintenance, repairs, applicable executive orders, District permits, manufacturer's operating and maintenance instructions, and testing requirements/procedures. [District Rule 2.22, §501/C-10-117]
- 84. The owner/operator shall keep records of all self-compliance inspections, source tests, repairs, and quarterly throughput. These records shall be retained for a period of two (2) years and shall be made available to District personnel upon request. [District Rule 2.22, §502/C-10-117]

# Petroleum Contaminated Soil Handling Operation (P-64-00)

- 85. The Permit Holder shall maintain the following records for petroleum contaminated soil usage in a District-approved log book:
  - a. Petroleum contaminated soil lot number,
  - b. Date petroleum contaminated soil was received.
  - c. Amount of petroleum contaminated soil received daily in tons,
  - d. Total VOC concentration of the petroleum contaminated soil provided by the waste generator in milligrams of VOC per kilogram of soil, and
  - e. VOC emissions in pounds per day, pounds per calendar quarter, and tons per calendar year. [District Rule 3.4/C-99-134]
- 86. The Permit Holder shall make all petroleum contaminate soil usage records available to District personnel upon request and shall keep all records for a minimum of five (5) years from the date of entry. [District Rule 3.4/C-99-134]

# MSW Landfilling Operation (P-85-06(a4))

- 87. The Permit Holder shall maintain a written log of all maintenance work performed that requires the shutdown of the gas collection system. The log shall include a description of work, the date work was performed, and the amount of time needed to complete the maintenance work. Emissions of landfill gas to the atmosphere shall be minimized during each shutdown. [District Rule 3.4/C-10-34]
- 88. The Permit Holder shall maintain daily records (in tons) of the total amount of MSW accepted at the landfill. [District Rule 3.4/C-10-34]
- 89. The Permit Holder shall monitor and record on a quarterly basis the cumulative quarterly and annual landfill gas fuel usage (in cubic feet) from the totalizing meter serving the flare. [District Rule 3.4/C-10-34]
- 90. The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)/C-10-34]
- 91. An amended design capacity report shall be submitted to the APCO providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in Section 60.758(f). [40 CFR Part 60.757(a)(3)]

# Emergency IC Engine (P-86-06)

92. The Permit Holder shall maintain a log of the operation hours for the IC engine (P-86-06) identifying the type of usage (either maintenance or emergency), the duration and date of each usage. The log shall be retained for a period of five (5)

years and be made available to District personnel upon request. [District Rule 3.4, §501/C-06-119]

Receiving, Storage, and Drying of non-hazardous Sludge with odor potential (P-81-10)

93. The Permit Holder shall maintain daily records (in tons) of the amount of non-hazardous sludge waste with odor potential received. [District Rule 3.4/C-10-42]

# Internal Combustion Engine Powering a Tipper (P-5-11)

- 94. The Permit Holder shall monitor and record the cumulative quarterly and annual propane fuel usage from the totalizing meter. The records shall be updated quarterly and made available to the District upon request. [District Rule 2.32, §501]
- 95. The Permit Holder shall maintain records of maintenance for the engine and control device according to the manufacturer's emission related instructions, notifications submitted to comply with the subpart, and documentation from the manufacturer that the engine is certified to meet the applicable emission standards. [40 CFR Parts 60.4243 and 60.4245/C-10-58]
- 96. The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)/C-10-58]

## III. FACILITY WIDE REQUIREMENTS

# A. Opacity

- 97. The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
  - a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines; or
  - Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection a. of this condition. [District Rule 2.3]

#### B. Nuisance

98. The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property. [This permit condition is federally enforceable because it derives from District Rule 2.5 - Nuisance that is currently part of the California State

Implementation Plan (SIP). The District is taking steps to remove Rule 2.5 from the SIP. Once the U.S. Environmental Protection Agency (EPA) has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become state-enforceable only]

# C. Circumvention

99. The Permit Holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California or District Rules or Regulations. [District Rule 2.17]

## D. General Permit Requirements

- 100. No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the APCO as specified in Section 401 of District Rule 3.1. [District Rule 3.1, §301.1]
- 101. No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by District Rules and Regulations without first obtaining a written permit from the APCO. [District Rule 3.1, §302.1]
- 102. No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, without obtaining a permit from the APCO or the Hearing Board. [District Rule 3.1, §302.2]
- 103. The owner or operator of any facility, article, machine, equipment, or other contrivance for which a permit to operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the permit to operate exists. Such notice shall be given to the District no later than four hours after occurrence during regular workday hours or no later than two hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1, §405.3]

# IV. TITLE V GENERAL REQUIREMENTS

## A. Right of Entry

- 104. The permit shall require that the source allow the entry of the District, ARB, or U.S. EPA officials for the purpose of inspection and sampling, including:
  - a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
  - b. Inspection and duplication of records required by the permit to operate; and
  - c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

## B. Compliance with Permit Conditions

- 105. The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11(a)]
- 106. The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11(b)]
- 107. Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11(c)]
- 108. The Permit Holder shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11(d)]
- 109. A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11(e)]
- 110. Within a reasonable time period, the Permit Holder shall furnish any information requested by the APCO, in writing, for the purpose of determining:
  - a. Compliance with the permit; or
  - b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11(f)]

## C. Emergency Provisions

- 111. Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:
  - a. An emergency occurred;
  - b. The Permit Holder can identify the cause(s) of the emergency;
  - The facility was being properly operated at the time of the emergency;
  - All steps were taken to minimize the emissions resulting from the emergency;
    and

e. Within two working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken; and

In any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

# D. Severability

112. If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

# E. Compliance Certification

- 113. The Responsible Official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on January 1 and end on December 31, and will be due by January 31 for the previous reporting year, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 114. The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of District Rule 3.8. [District Rule 3.8, §302.14(b)]
- 115. The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14(c)]
- 116. The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [District Rule 3.8, §302.14(d)]

#### F. Permit Life

117. The Title V permit shall expire five (5) years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]

## G. Payment of Fees

118. An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

# H. Permit Revision Exemption

119. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [District Rule 3.8, §302.22]

# I. Application Requirements

- 120. An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. [District Rule 3.8, §402.2]
- 121. An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]
- 122. An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:
  - a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
  - b. Proposed permit terms and conditions; and
  - c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

## J. Permit Reopening for Cause

- 123. Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:
  - a. The need to correct a material mistake or inaccurate statement;
  - b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;

- c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is three (3) years or greater, no later than 18 months after the promulgation of such requirement (where less than three (3) years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
- d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

# K. Recordkeeping

- 124. The Permit Holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:
  - Date, place, and time of sampling;
  - b. Operating conditions at the time of sampling;
  - c. Date, place, and method of analysis; and
  - d. Results of the analysis. [District Rule 3.8, §302.6(a)]
- 125. The Permit Holder shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of sample collection, measurement, report, or application. [District Rule 3.8, §302.6(b)]

# L. Reporting Requirements

- 126. Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than ten (10) days after detection. [District Rule 3.8, §302.7(a)]
- 127. A semi-annual monitoring report shall be submitted at least once every six (6) consecutive calendar months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. Unless otherwise approved in writing by the District, the following shall apply:
  - a. The first six (6) month monitoring period will begin on January 1 and end on June 30, and the report will be due by July 31 of the reporting year; and
  - b. The second six (6) month period will begin on July 1 and end on December 31, and will be due on January 31 of the following calendar year.
- 128. All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7(c)]
- 129. Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7(e)]